

# Understanding Teleconnection Effects of Tibetan Plateau Soil Anomalies

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# CWRF Experiments

Experiment	Description
CTL	Atmospheric initial and lateral boundary conditions are from ERA5 reanalysis. Land surface initial conditions are from the CoLM offline.
LST	Same as CTL run, except for an initial LST/SUBT mask is imposed over the TP.
SMI	Same as CTL run, except for different initialization of soil moisture with extreme wet/dry anomalies.
SWI	Same as CTL run, except for different initialization of snow depth with $\pm 20\%$ anomalies.

**Grid:** 30km 36 levels

**Driving:** ERA5

**Initial soil :** CoLM

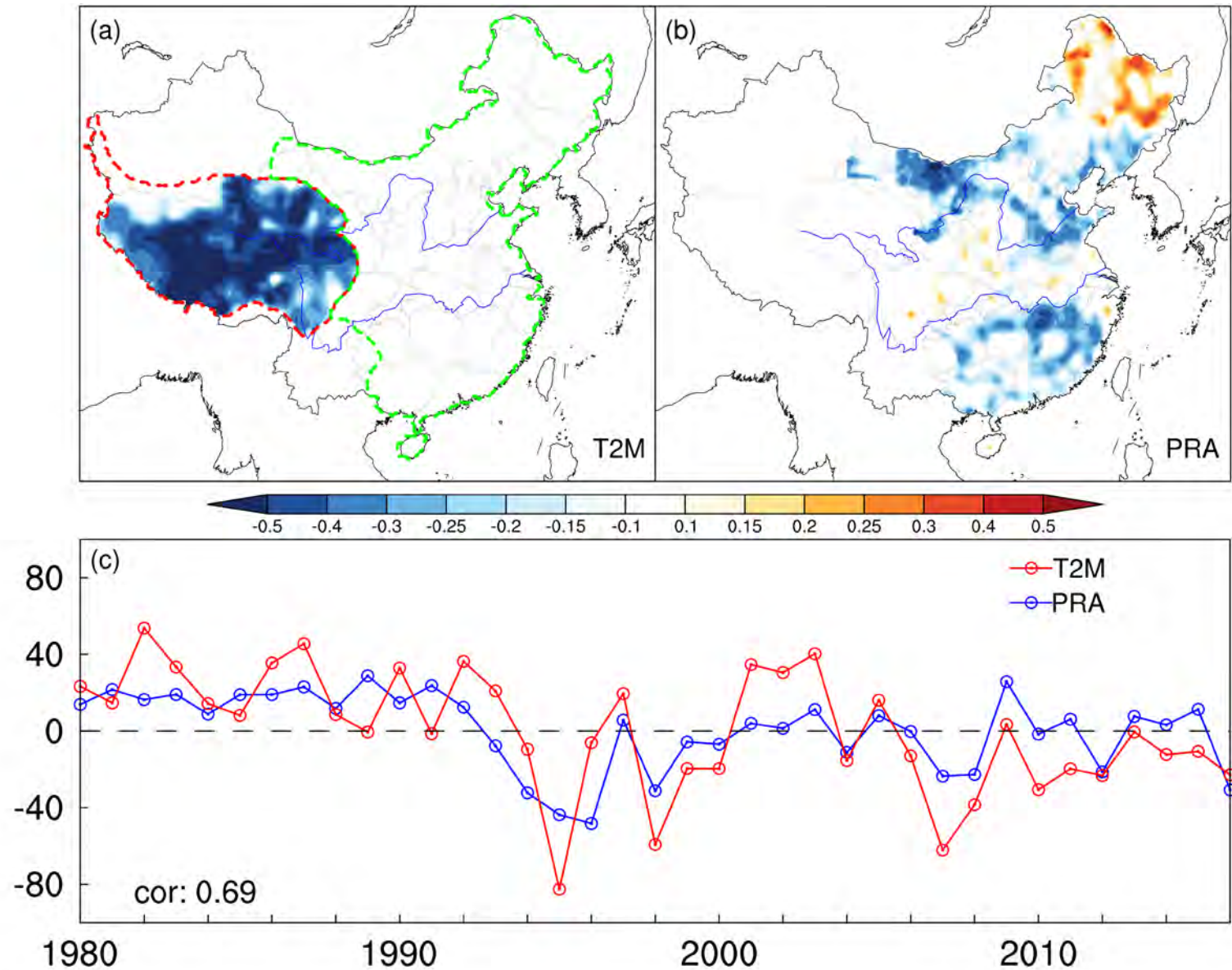
**Time period:**

Late spring – Dec 31, 1998

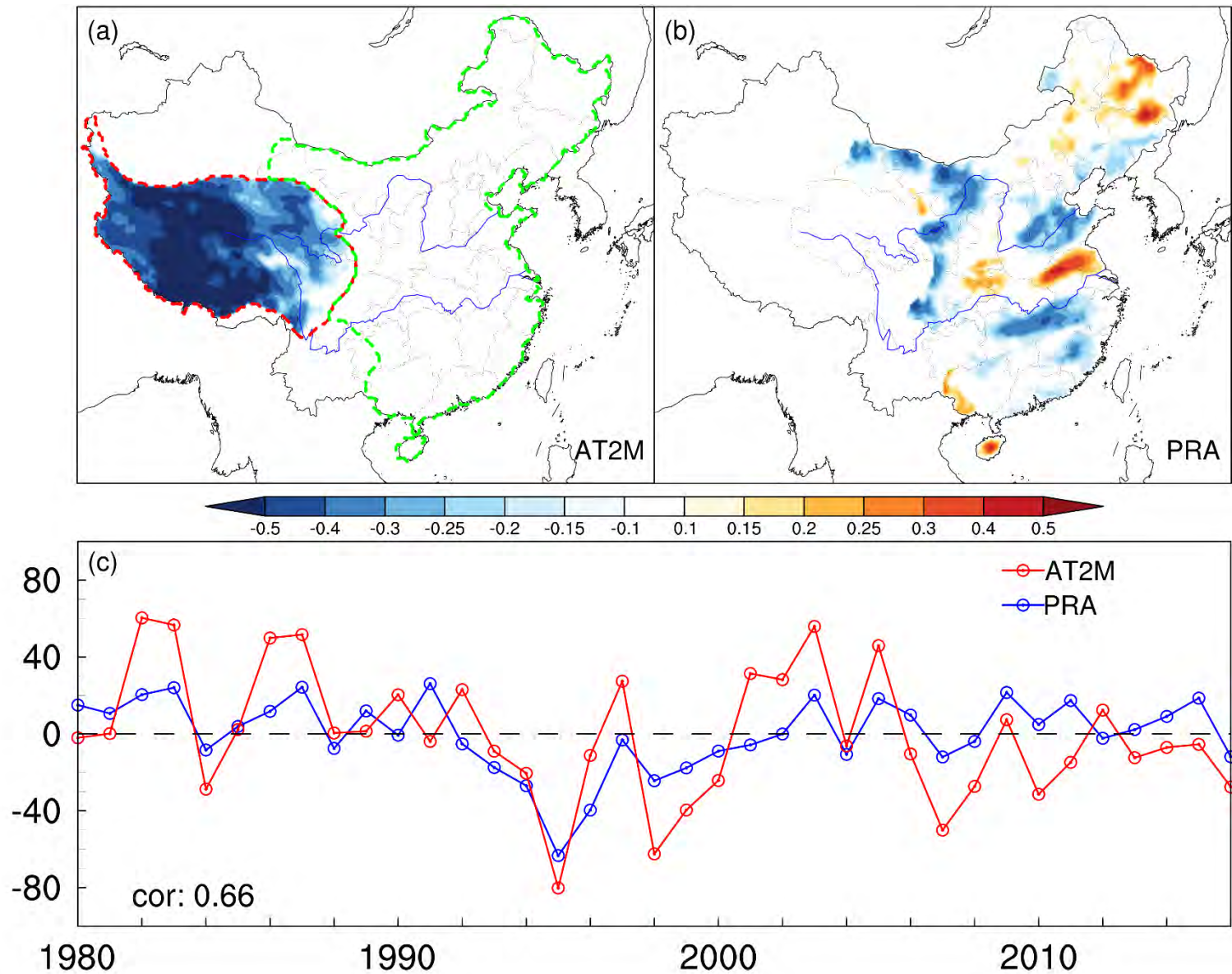
Multiple realizations (initial dates)

We have finished a few realizations of these experiments,  
but the post-processing is in progress.

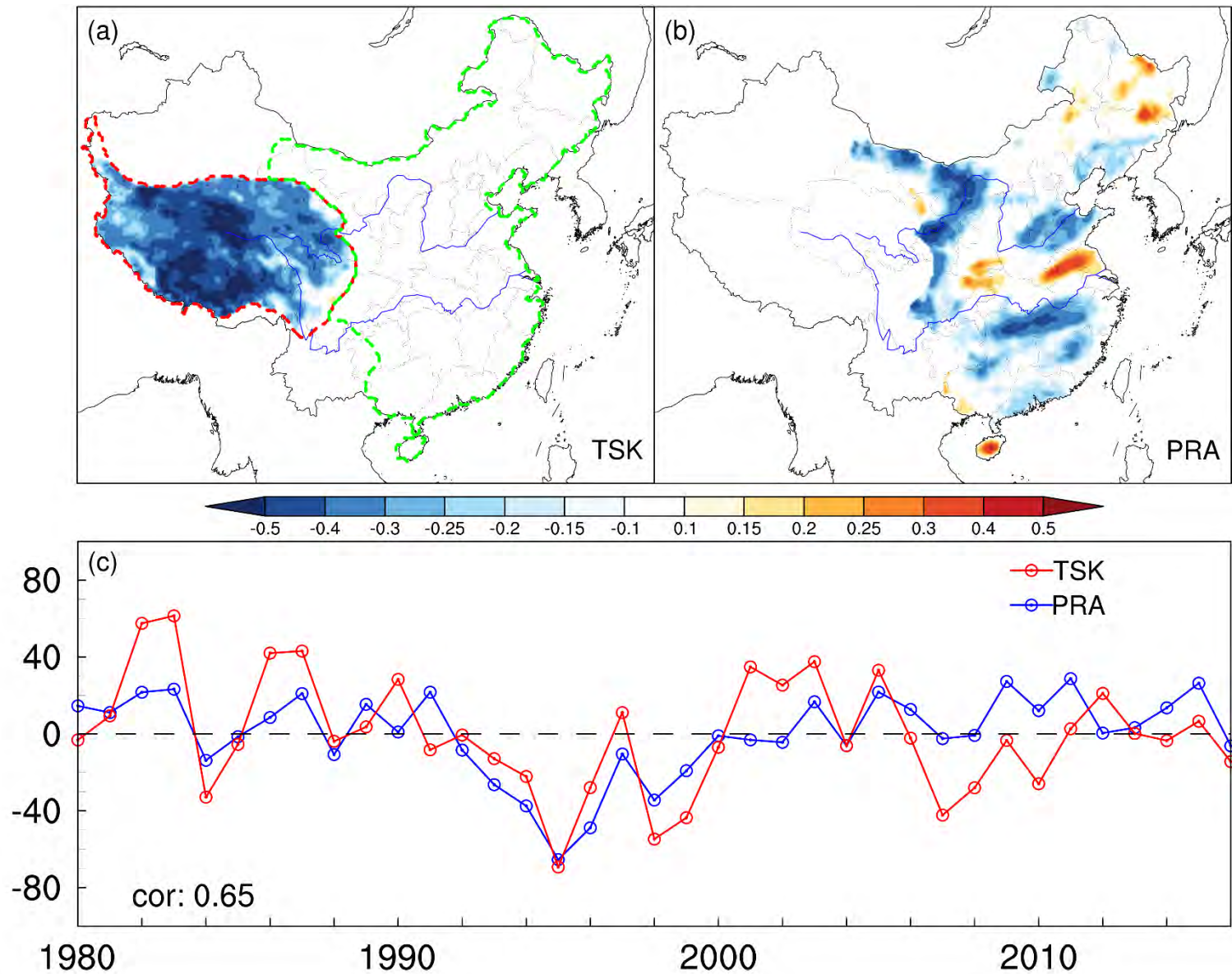
**Observed** first SVD mode for May air temperature with key signals over the TP with summer precipitation with key signals over eastern China (Xu et al. 2022)



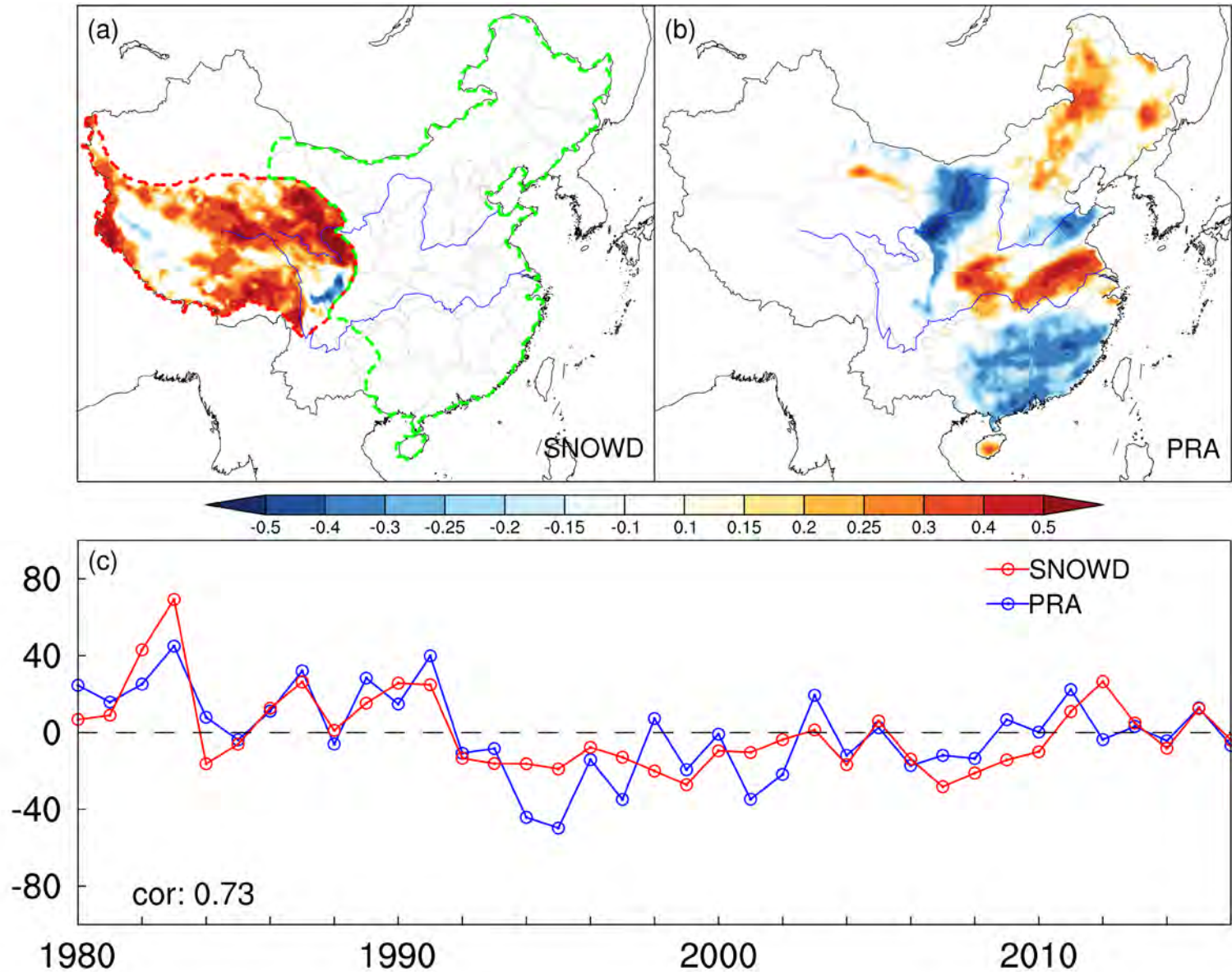
# Teleconnections in ERA5 Reanalysis



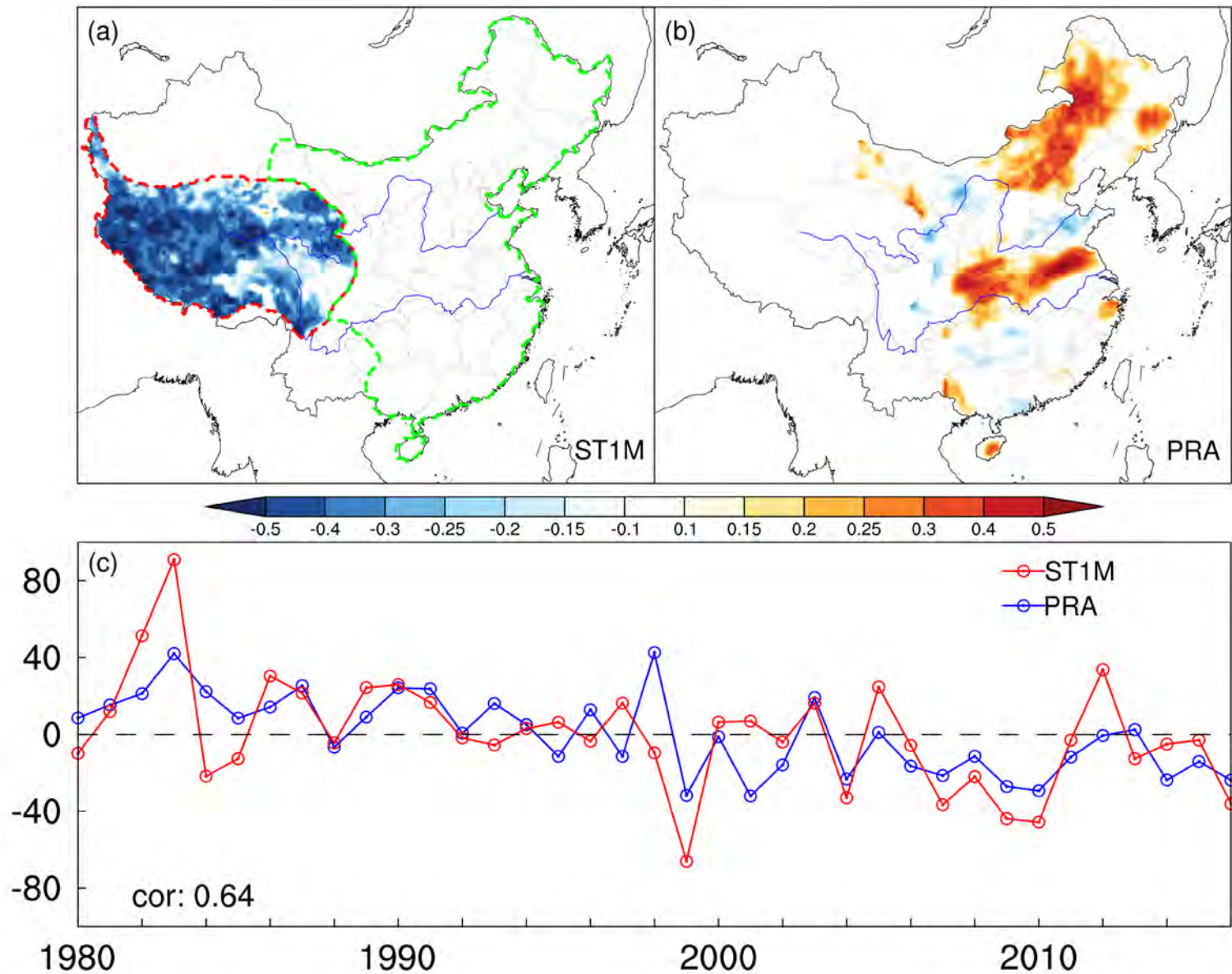
# Teleconnections in ERA5 Reanalysis



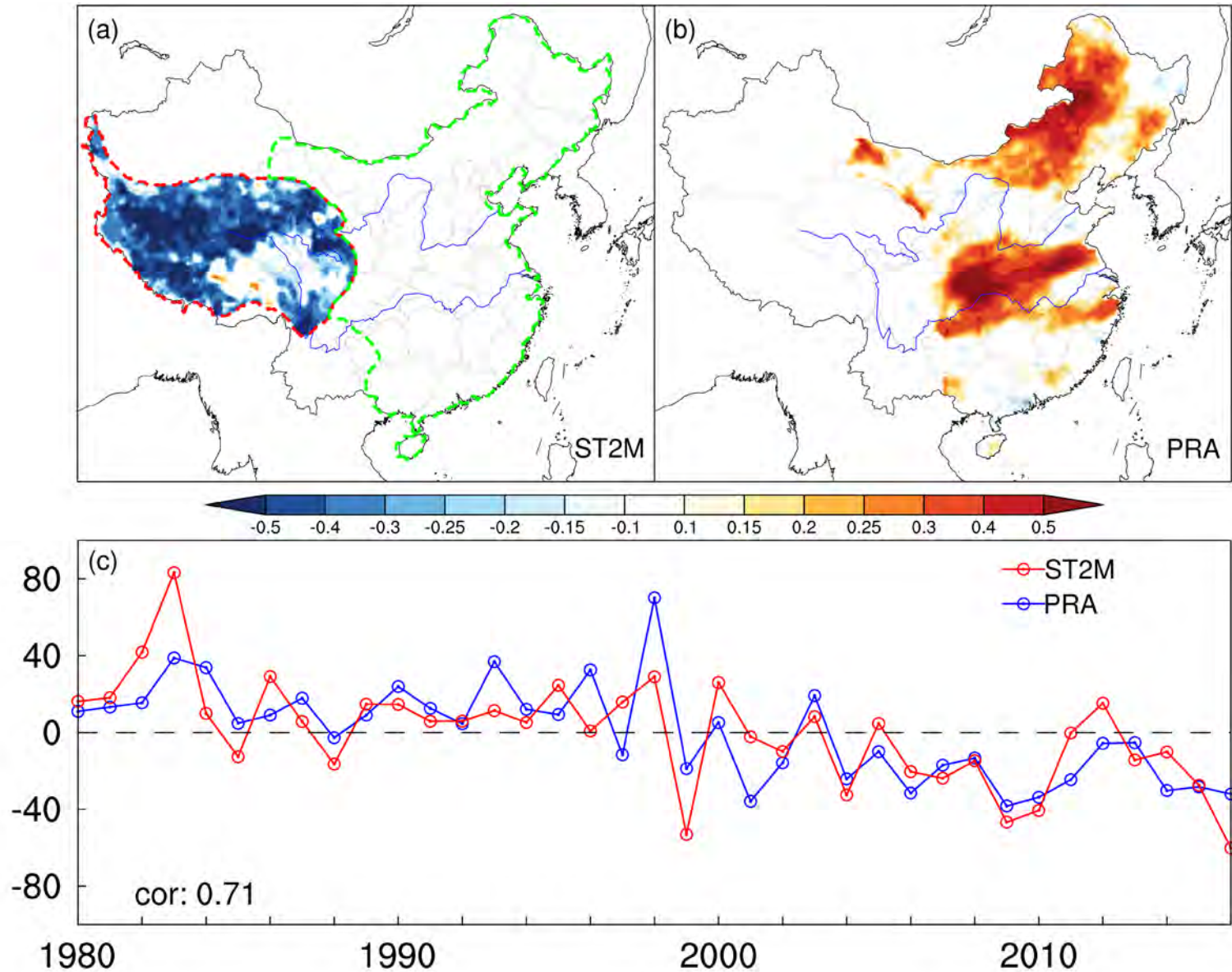
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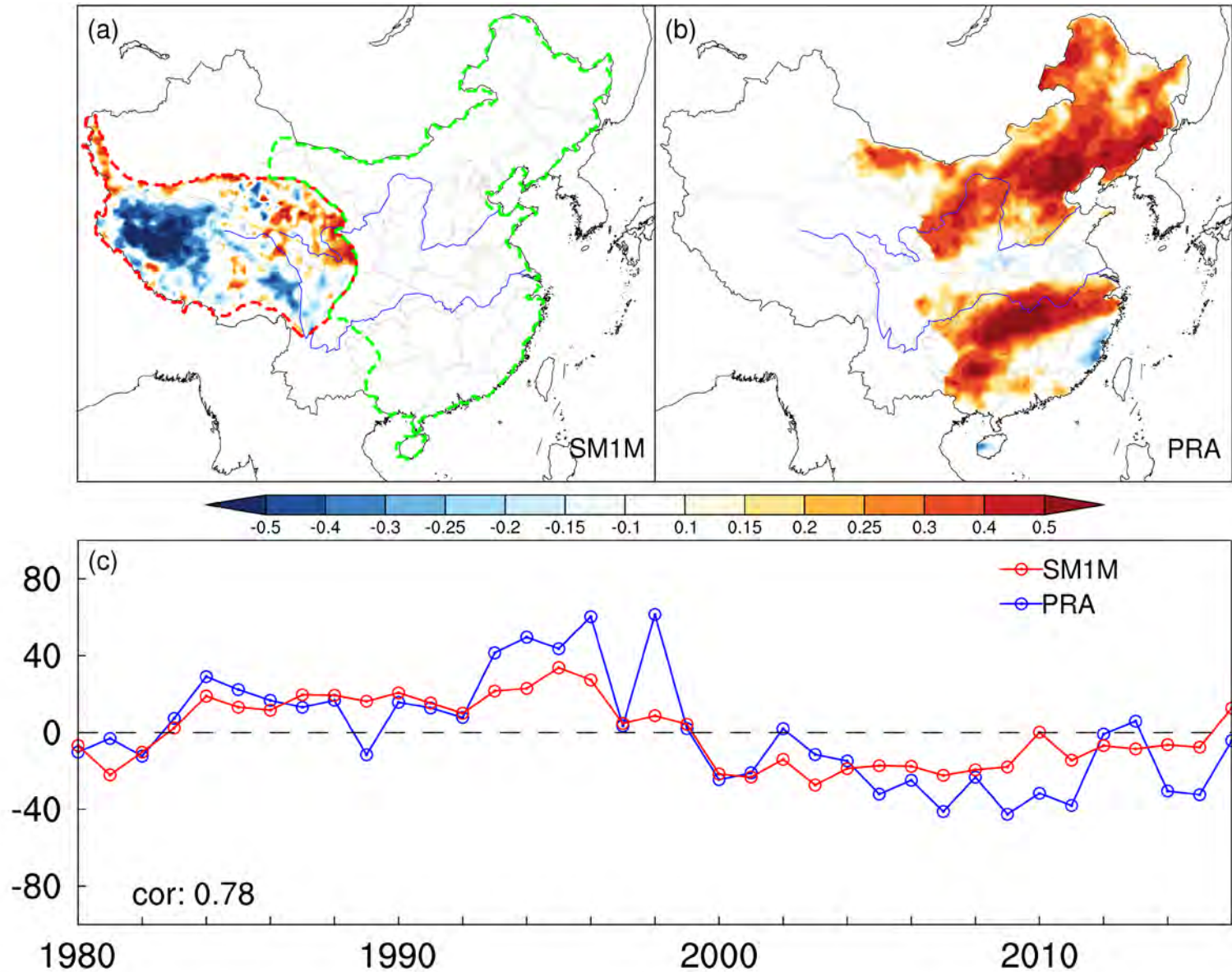


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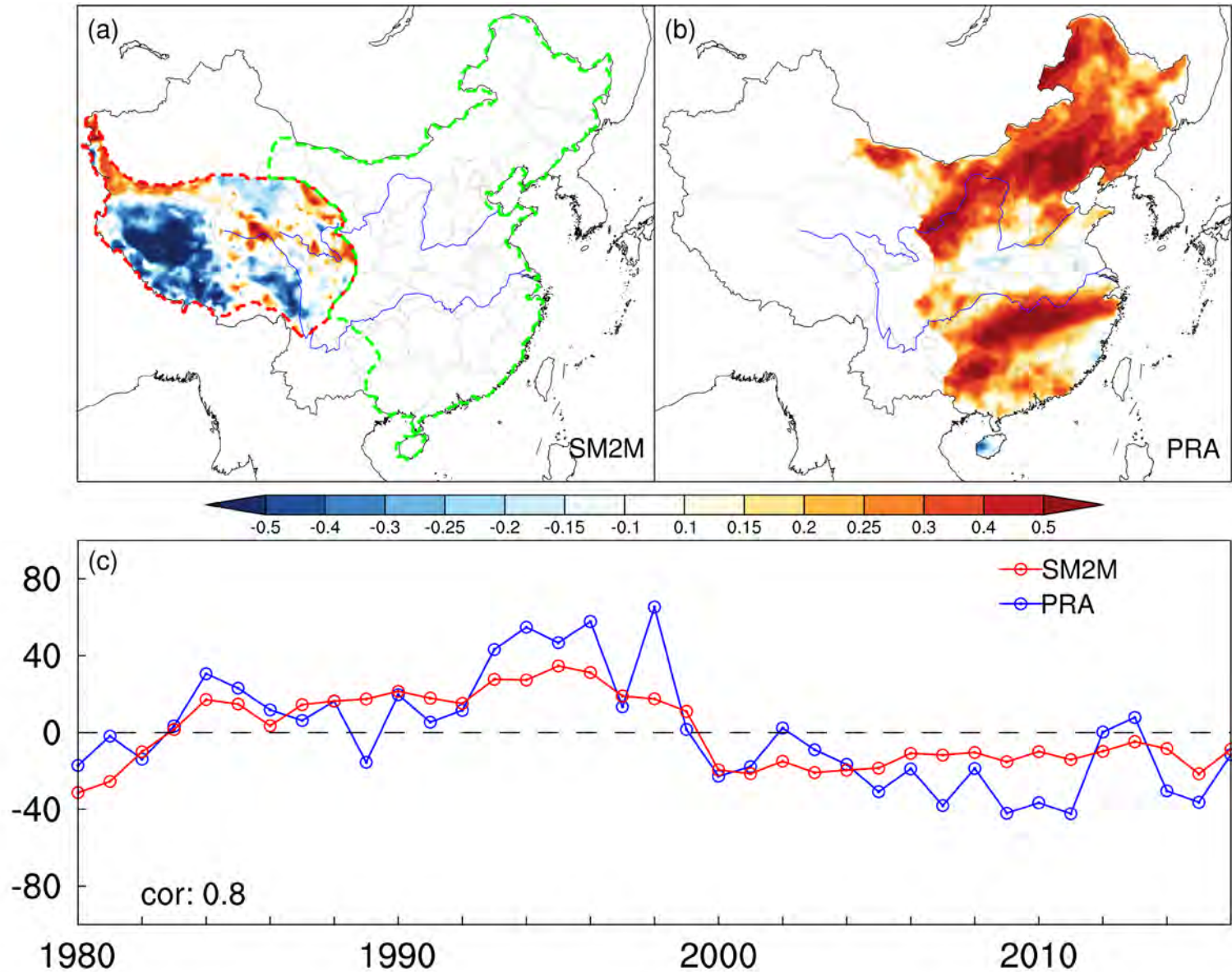




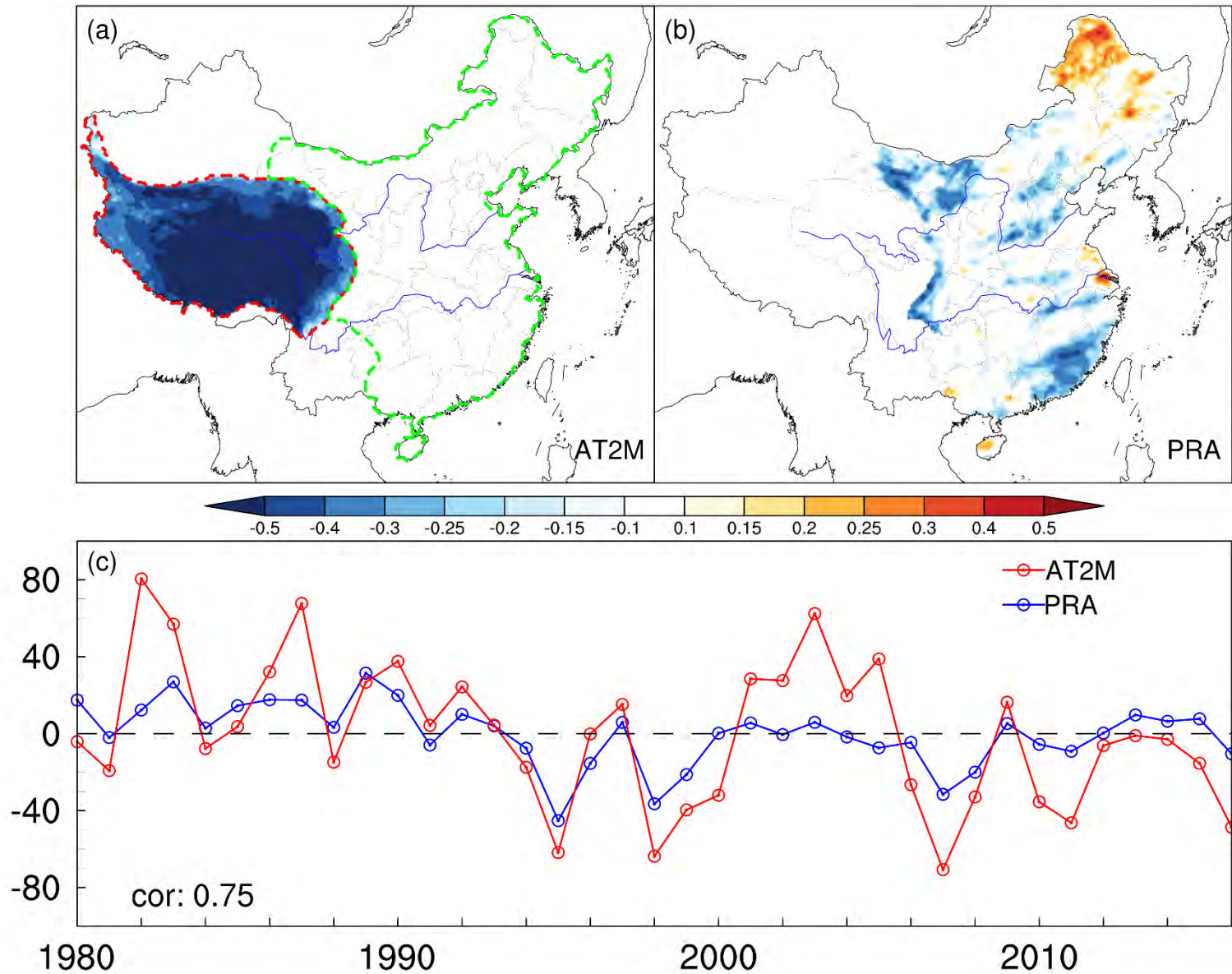
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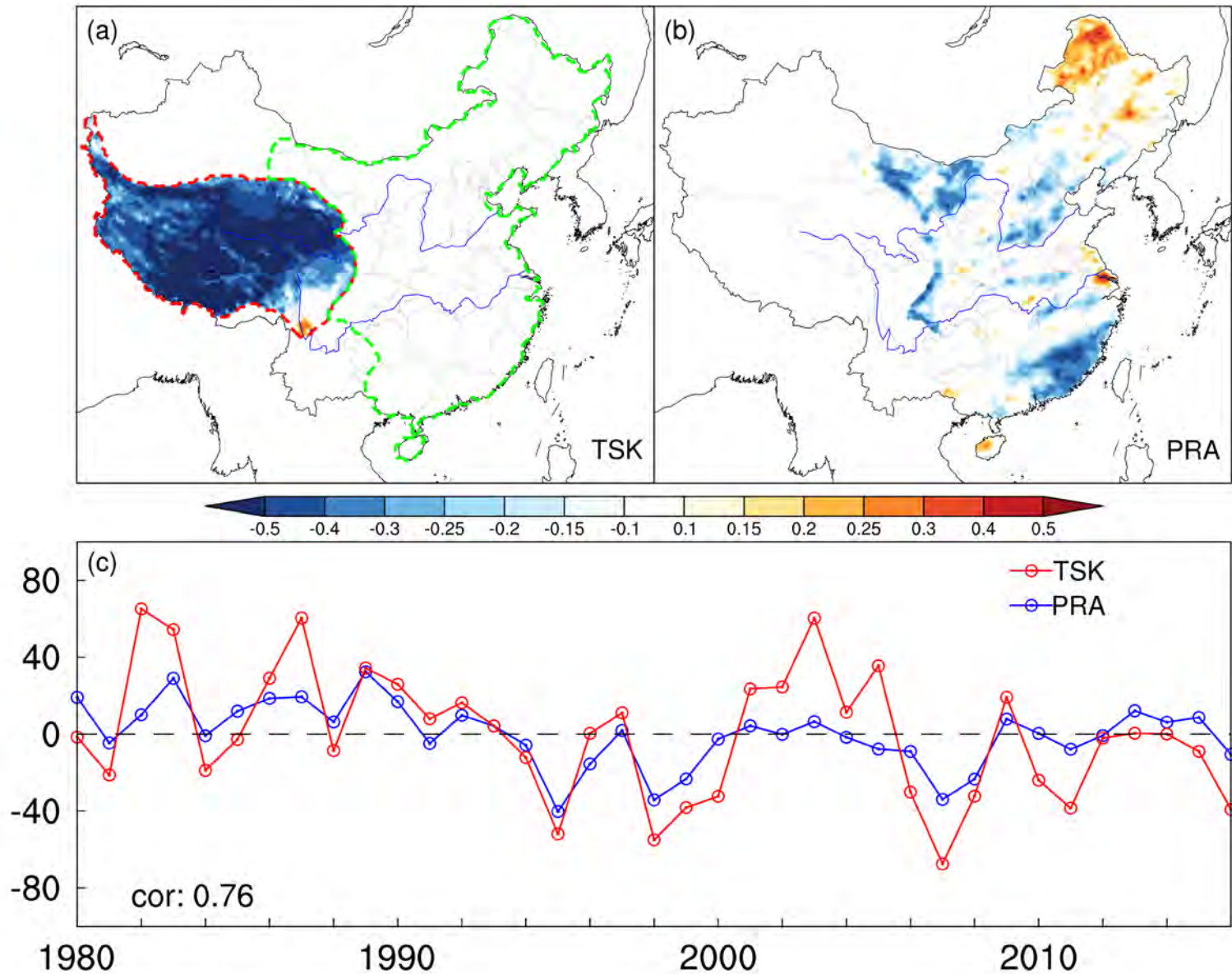
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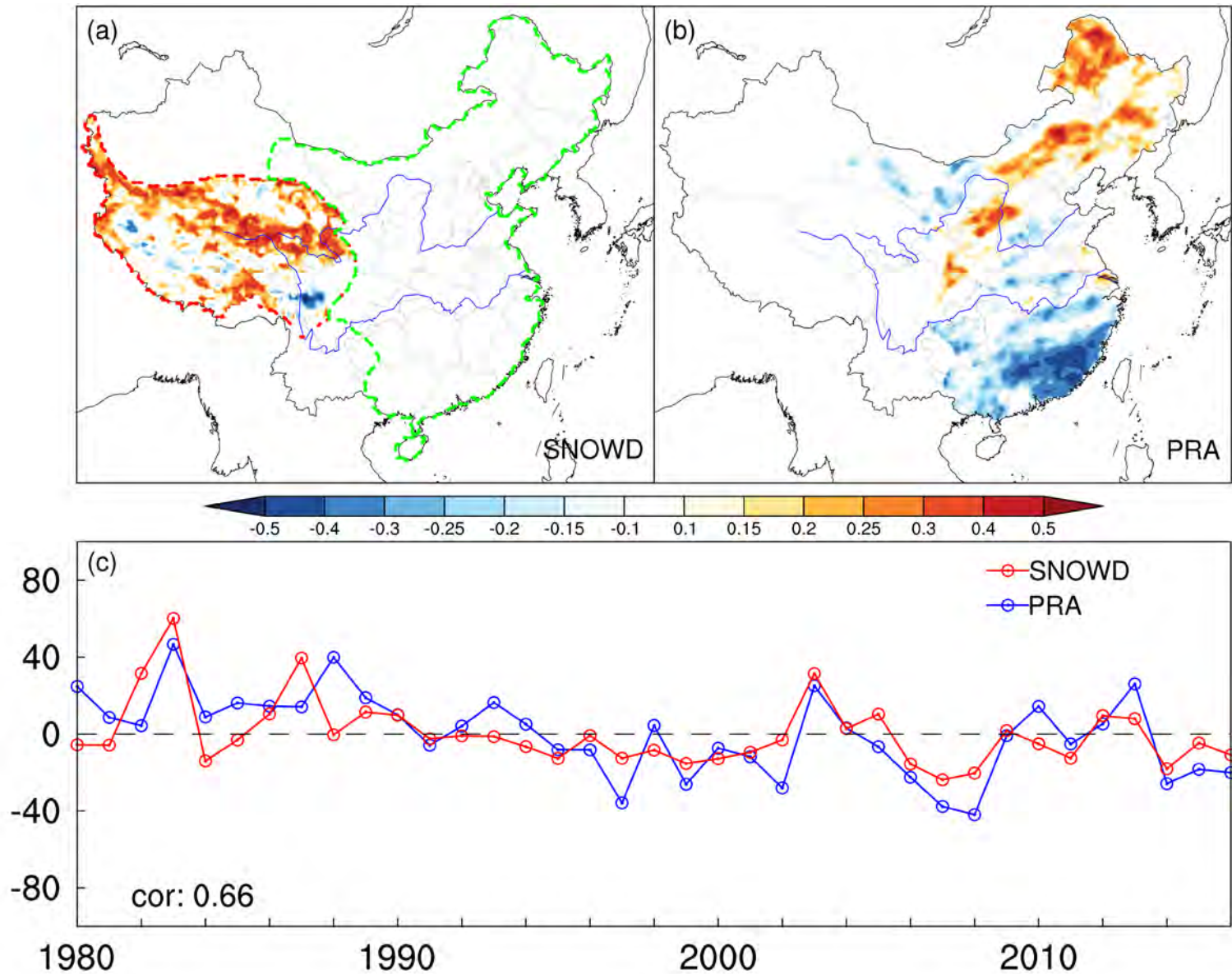
# Teleconnections in CWRF simulation



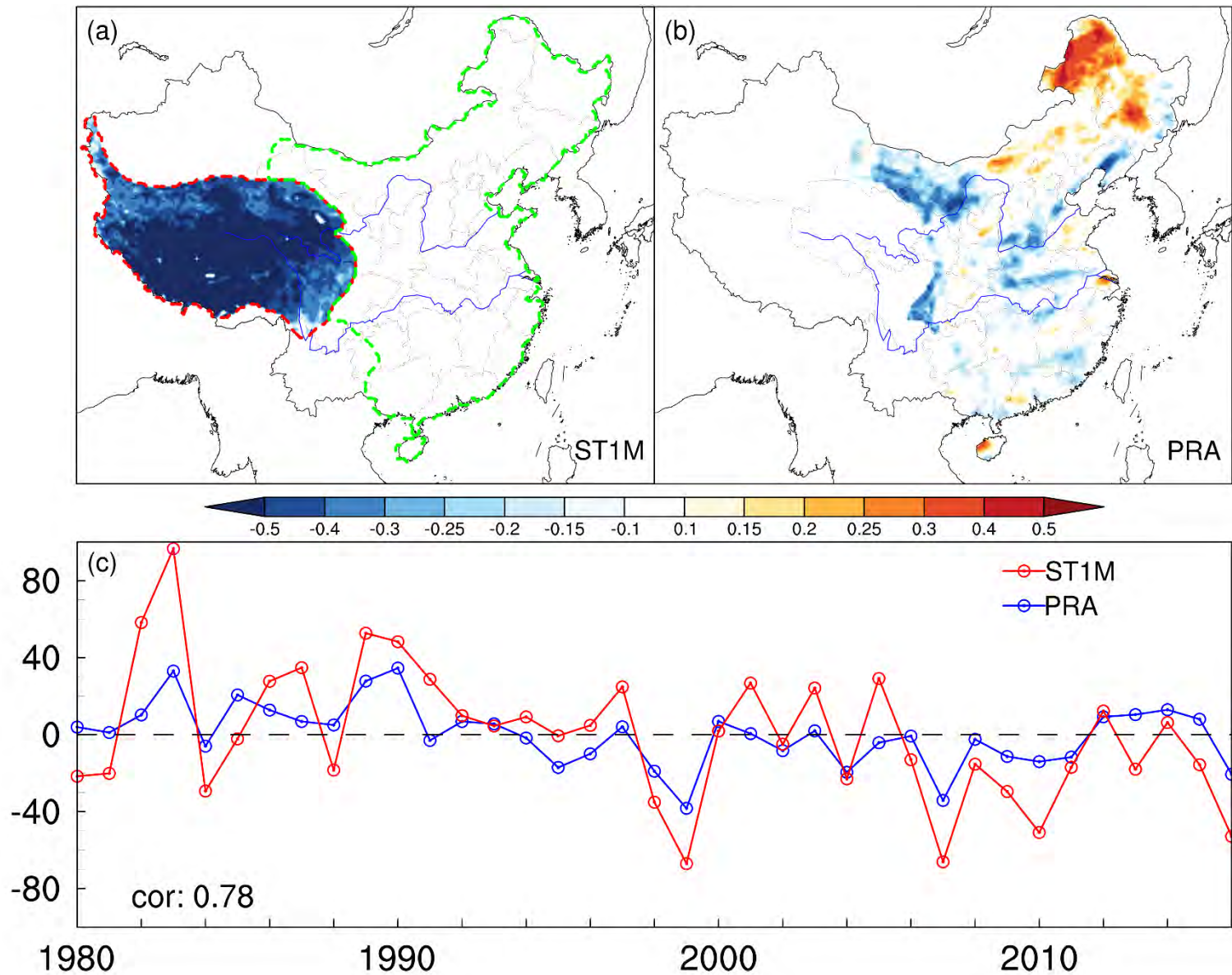
# Teleconnections in CWRF simulation



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# Teleconnections in CWRF simulation

